

PATENT ABSTRACTS OF JAPAN

(11) Publication number : 2005-166557

(43) Date of publication of application : 23.06.2005

(51) Int.CI.

H01M 8/02
C08J 9/40
H01B 1/06
H01B 13/00
H01M 8/10
// C08L101:00

(21) Application number : 2003-406364

(71) Applicant : JSR CORP

HONDA MOTOR CO LTD

(22) Date of filing :

04.12.2003

(72) Inventor : OTSUKI TOSHIKATA

HIGAMI MAKOTO

KANEOKA NOBUYUKI

ASANO YOICHI

NANAUMI MASAAKI

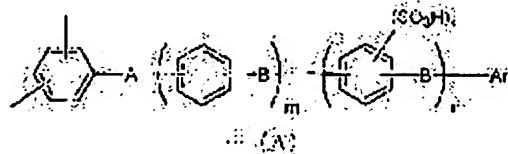
SOMA HIROSHI

(54) POLYMER ELECTROLYTE COMPOSITE MEMBRANE, ITS MANUFACTURING METHOD AND SOLID POLYMER TYPE FUEL CELL USING IT

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a polymer electrolyte composite membrane having low electric resistance and high mechanical strength; to provide its manufacturing method; and to provide a solid polymer type fuel cell using it.

SOLUTION: This polymer electrolyte composite membrane is formed by impregnating, into a porous base material, polyarylene having a sulfonic acid group having a repeating unit expressed by formula A. In this manufacturing method of the polymer electrolyte composite membrane, a solution of polyarylene having the sulfonic acid group having the repeating unit expressed by formula A is impregnated into the porous



base material and thereafter dried. In formula A, A is a bivalent electron absorbing group; B is a bivalent electron-donating group or direct bonding; Ar is an aromatic group having a substituted group expressed by -SO₃H: m is an integer of 0 to 10; n is an integer of 0 to 10; and k is an integer of 1 to 4.

LEGAL STATUS

[Date of request for examination] 27.07.2005

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office